ORDER NO. AD9103041C8

Service Manual

Equalizer

Stereo Sound Processor

SH-E85

Color

(K)... Black Type

Area

Country Code	Area	Color
(E)	Continental Europe.	(K)
(EB)	Great Britain.	(K)
(EG)	FR. Germany & Italy.	(K)
(GC)	Asia, Latin America, Middle Near East and Africa.	(K)
(GN)	Oceania.	(K)

SPECIFICATIONS

(DIN 45 500)

Frequency response : 5 Hz~45 kHz (−3 dB)
Maximum output voltage : 6.2 V (1 kHz, THD 0.03%)
Rated output voltage : 1 V
Maximum input voltage : 6.2 V (1 kHz)
Rated input voltage : 1 V
Input impedance : 22 kΩ
Rated total harmonic distortion : 0.005% (20 Hz~20 kHz) at 1 V output
0.003% (1 kHz) at 1 V output
S/N : 93 dB/1 V
100 dB/1 V (IHF'A)
Gain : 0±1 dB
Equalization-level controls : +12 dB~−12 dB
(7 frequency ranges, in 2-dB steps)
Channel separation : 60 dB
Channel balance : ±0.5 dB
Center frequencies : 63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 12.5 kHz
Mic input sensitivity : 0.8 mV/22 kΩ
DSC section : 3 modes (DISCO, MOVIE, DOME)
Delay Time (5 msec~1.0 sec)
Equalizer section : EQ ON/FLAT
Memory (FIXED) 1~3 ch
(MANUAL) 1~3 ch
Display mode (EQ/SPECTRUM. SPECTRUM 5 modes)

GENERAL

Power supply
For (GC) : AC 50/60 Hz, 110 V/127 V/220 V/240 V
For others : AC 50/60 Hz, 230−240 V
Power consumption : 11 W
(with power switch at STANBY: 8.2 W)
Dimensions (W×H×D)
For (EB, GC) areas. : 360×85×285 mm
(14³⁄₁₆"×3¹¹⁄₃₂"×11⁷⁄₃₂")
For (GN) area. : 360×85×292 mm
(14³⁄₁₆"×3¹¹⁄₃₂"×11½")
For (E, EG) areas. : 360×85×296 mm
Weight : 2.6 kg (5.7 lb.)

Notes:
1. Specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

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Technics

■ ACCESSORIES

- AC power supply cord 1
  - SJA187 (E, EG)
  - SJA188 (EB)
  - (RJA0004) (GC)
  - SJA173 (GN)
- Stereo connection cables 2 (SJP2249-3)
- AC plug adaptor ..... 1 (SJP9215) (GC)
- L-type cable 1 (SJP2257T)

■ CONNECTIONS

This is an equalizer that provides effects both during tape recording and playback if it is used while connected to an amplifier that has "EXT INPUT/OUTPUT" terminals.
If this unit is connected to an amplifier that does not have "EXT INPUT/OUTPUT" terminals, its effects are limited to playback only.

Make connections in the numbered sequence by using the included cables.

1 Connect the stereo connection cables.

2 Connect the L-type cable.

3 Connect the AC power supply cord.

The illustration below shows an example of connections made when this unit is combined with a Technics hi-fi component system, and shows only the connections to be made to and from this unit in that combination.
Refer to the illustration together with the instructions provided below.

"UNSWITCHED" outlet

Power is always available, regardless of power switch.

This outlet is only for use with other audio equipment.
Also, do not exceed the indicated power rating when connecting to this outlet.

Note:
The configuration of AC outlet differs according to area.

AC power supply cord (3)

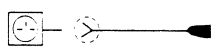
To the AC outlet of the audio equipment, or household AC outlet.

For United Kingdom

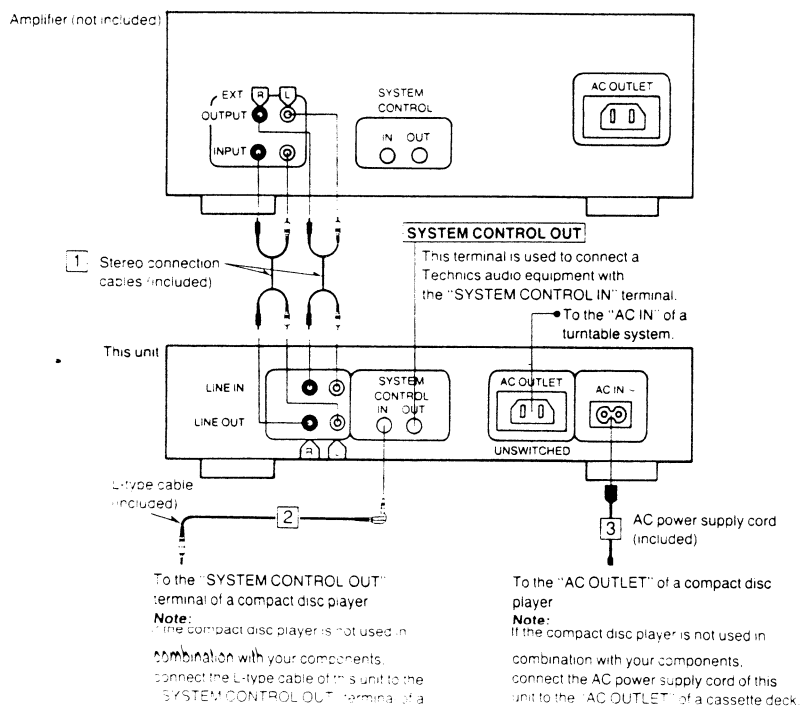
If the cord is to be connected to the household AC outlet, cut off and dispose of the plug and replace with a suitable plug. (Refer to "For United Kingdom".)

Fit a suitable plug to an AC power supply cord.

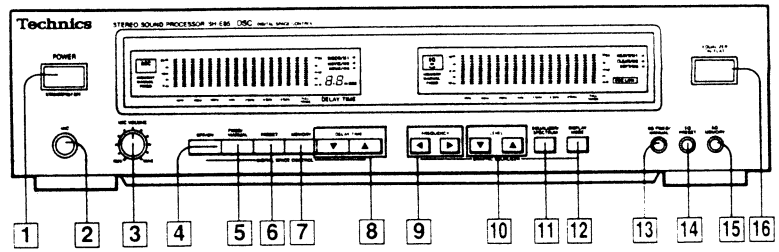
Household AC outlet



Notes:
- The configuration of AC power supply cord differs according to area.
- Connect this cord only after all other cables and cords have been connected.


Amplifier (not included)
EXT
OUTPUT
INPUT
R
L
SYSTEM CONTROL
IN OUT
AC OUTLET
SYSTEM CONTROL OUT
This terminal is used to connect a Technics audio equipment with the "SYSTEM CONTROL IN" terminal.
To the "AC IN" of a turntable system.
1 Stereo connection cables (included)
This unit
LINE IN
LINE OUT
SYSTEM CONTROL IN OUT
AC OUTLET
AC IN
UNSWITCHED
L-type cable (included)
2
3 AC power supply cord (included)
To the "SYSTEM CONTROL OUT" terminal of a compact disc player
Note:
If the compact disc player is not used in combination with your components, connect the L-type cable of this unit to the "SYSTEM CONTROL OUT" terminal of a cassette deck.
To the "AC OUTLET" of a compact disc player
Note:
If the compact disc player is not used in combination with your components, connect the AC power supply cord of this unit to the "AC OUTLET" of a cassette deck.

■ FRONT PANEL CONTROLS AND FUNCTIONS



Control section

1 Power "STANDBY ⏻ /ON" switch (POWER STANDBY ⏻ /ON)
This switch switches ON and OFF the secondary circuit power only. The unit is in the "standby" condition when this switch is set to the STANDBY ⏻ position. Regardless of the switch setting, the primary circuit is always "live" as long as the power cord is connected to an electrical outlet.
Note:
- For this unit, even if this switch is switched to the "STANDBY" position, there is still a slight power consumption of about 8.2 watts; this is in order to assure the retention of the "most recent" memory and the preset-memory functions.

"Power-through" function
Discs, radio broadcasts, etc. can be heard even if the power of this unit is switched to STANDBY.
Note, however, that the power plug should be left connected to the AC outlet.

2 Microphone jack (MIC)

3 Microphone volume control (MIC VOLUME)

4 DIGITAL SPACE CONTROL OFF/ON button (OFF/ON)
This button is used to produced a sound feels like a live performance.

5 DIGITAL SPACE CONTROL mode-select button (FIXED/MANUAL)
FIXED: Allows selection between the unit's built-in DISCO, MOVIE and DOME ambience enhancement modes.
MANUAL: Allows you to set three ambience enhancement characteristics to suit your personal taste.

6 DIGITAL SPACE CONTROL preset-button (PRESET)
After selecting either FIXED or MANUAL using the mode-select button, use this button to select between on of the ambience enhancement modes.

7 DIGITAL SPACE CONTROL memory button (MEMORY)
Press this button to save your own custom ambience enhancement characteristics in the unit's memory.

8 Delay time buttons (DELAY TIME)
Use these buttons to change the delay time as desired.

9 Frequency band selector buttons (FREQUENCY)
Use these buttons to select the frequency band to be adjusted.

10 Equalizer level-control buttons (LEVEL)
These buttons are used for adjustment of the equalization level of the left channel and right channel simultaneously.

11 Equalization-level/spectrum mode-select button (EQUALIZER/SPECTRUM)
This button is used to select the equalization-level display mode and the spectrum display mode.

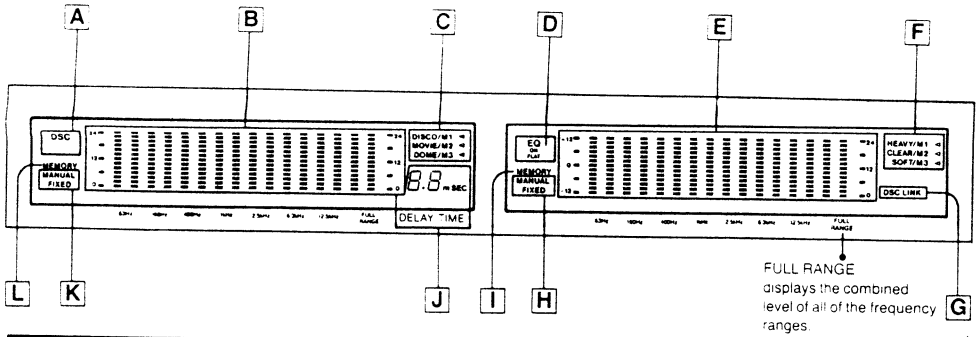
12 Display mode-select button (DISPLAY MODE)
The display mode changes each time this button is pressed. The unit can be set to any of the five spectrum display modes.

13 Memory mode-select button (EQ FIXED/MANUAL)
This button is used to select the equalization memory mode to be used.
FIXED: Select this mode to retrieve a curve that was originally pre-programmed to the unit's memory.
MANUAL: Select this mode to program a desired curve to the unit's memory or to retrieve a curve that you have programmed.

14 Preset-memory button (EQ PRESET)
This button is used to program an equalization curve into the memory, or to retrieve a curve originally programmed into the unit's memory of a curve that you have programmed into the memory.

15 Memory button (EQ MEMORY)
This button is used to program the equalization curve into the memory.

16 Equalization mode-select button (EQUALIZER ON/FLAT)
This button is used to switch the equalization correction function "EQ ON" and "FLAT".
EQ ON: Select this mode to make an equalization correction.
FLAT: Select this mode if no equalization correction is desired.



Display section

A DIGITAL SPACE CONTROL indicator
The edge of the indicator lights red when DIGITAL SPACE CONTROL has been turned on using the DIGITAL SPACE CONTROL (DSC) OFF ON button.

B Spectrum display

■ **Spectrum display (Left channel)**
The unit has five built-in display modes. Use the display mode-select button to choose the display type, signal strength, light show, etc.

C DIGITAL SPACE CONTROL (DSC) mode-select indicators
These indicators show which of the three FIXED or three MANUAL ambience enhancement modes is in use.
DISCO-DOME: Indicates which of the three built-in FIXED ambience enhancement modes has been selected.
M1–M3: Indicates which of the three custom MANUAL ambience enhancement modes has been selected.

D Equalization-mode indicators
EQ ON: Indicates that the equalization effect has been switched ON.
FLAT: Indicates that the equalization effect has been switched FLAT.

E Equalization/Spectrum display
The following equalization-level display and five types of spectrum display are possible.

■ **Equalization-level display**
The amount of correction is displayed by a series of lines (=) for each sound range (frequency range).

■ **Spectrum display (Right channel)**
The unit has five built-in display modes.

Note:
If an equalization level-control or the memory-mode selector or a preset-memory button is pressed during any display other than the equalization-level display, the equalization-level display will be shown for about three seconds, after which the former display will return.

F Equalization-preset indicators
These indicators show which of the three FIXED or three MANUAL equalization curves is currently in use.
HEAVY-SOFT: Indicates one of the equalization curves that were originally programmed into the memory.
M1–M3: Indicates an equalization curve that you programmed into the memory.

G DSC LINK indicator
DSC LINK indicator illuminates when one of the DSC fixed modes or manual modes is retrieved. This shows that the DSC effect is combined with the equalization effect.

H Memory-mode indicators
FIXED: Indicates that one of the equalization curves that were originally programmed into the memory can be retrieved.
MANUAL: Indicates that an equalization curve that you programmed into the memory can be retrieved.

I Equalization-memory indicator
This indicator illuminates when the memory button is pressed, thus indicating that an equalization curve can be programmed into the memory.

J Delay time display
This display shows the current delay time setting.

K DIGITAL SPACE CONTROL (DSC) mode indicators
MANUAL: Lights when one of your custom ambience enhancement settings is in use.
FIXED: Lights when one of the ambience enhancement settings that were originally programmed into memory is in use.

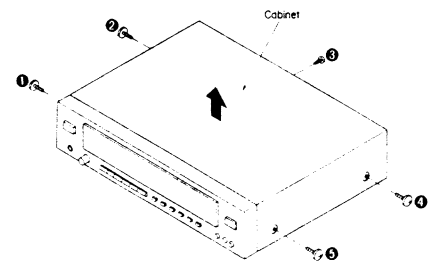
L DIGITAL SPACE CONTROL (DSC) memory indicator
This indicator lights when the DIGITAL SPACE CONTROL memory button has been pressed in order to program a custom ambience enhancement settings into the unit's memory.

■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

Ref. No. 1 — Removal of the cabinet

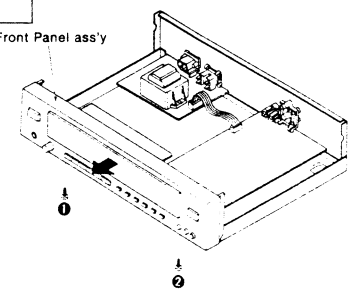
Procedure 1



• Remove the 5 screws (❶~❺).

Ref. No. 2 — Removal of the front panel ass'y

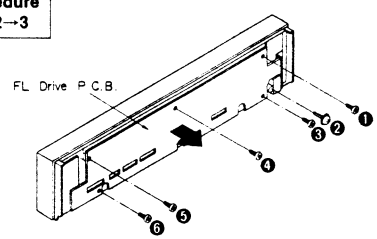
Procedure 1→2



1. Remove the 2 screws (❶, ❷).
2. Remove the front panel ass'y in the direction of arrow.

Ref. No. 3 — Removal of the FL drive P.C.B.

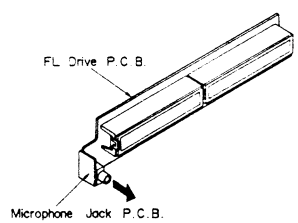
Procedure 1→2→3



1. Remove the 6 screws (❶~❻).
2. Remove the FL drive P.C.B. in the direction of arrow.

Ref. No. 4 — Removal of the microphone jack P.C.B.

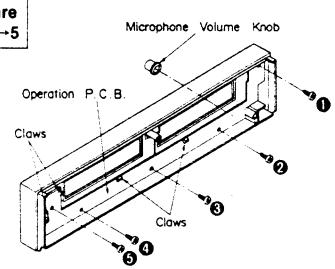
Procedure 1→2→3→4



• Remove the microphone jack P.C.B. in the direction of arrow.

Ref. No. 5 — Removal of the operation P.C.B.

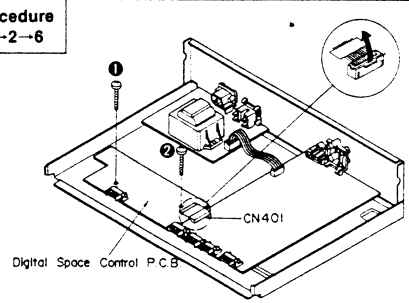
Procedure 1→2→3→5



1. Pull out the microphone volume knob.
2. Remove the 5 screws (❶~❺).
3. Release the 4 claws.

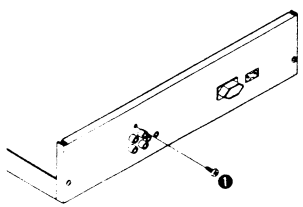
Ref. No. 6 — Removal of the digital Space control P.C.B.

Procedure 1→2→6

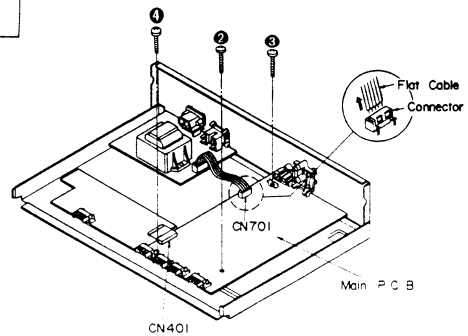


1. Remove the 1 connector (CN401).
2. Remove the 2 screws (❶, ❷).

Ref. No. 7	Removal of the main P.C.B.
Procedure 1→2→7	



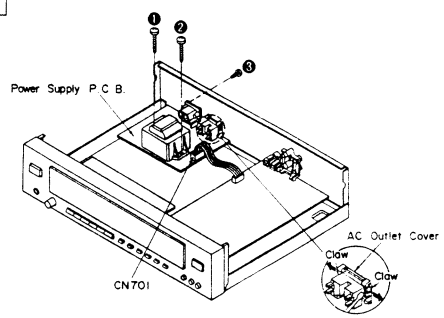
1. Remove the 1 screw (❶).



2. Remove the 1 flat cable (CN701).
3. Remove the 1 connector (CN401).
4. Remove the 3 screws (❷~❹).

Ref. No. 8	Removal of the power supply P.C.B.
Procedure 1→8	

1. Remove the 1 flat cable (CN701).
2. Remove the 3 screws (❶~❸).
3. Release the 2 claws of AC outlet cover.



■ TERMINAL FUNCTION OF IC'S

• IC401 (M50194P): Digital delay

Pin No.	Mark	I/O Division	Function
1	NC	—	Non connection
2	V_{CC}	I	Power supply terminal
3	REF	I	Referemce voltage terminal
4	A GND	—	GND terminal
5	D GND		
6	X OUT	O	Cystal osc terminal (4MHz)
7	X IN	I	
8	μ/$\overline{EASY}$	—	H=Microcomputer mode: serial data control L=Easy mode: parallel date control
9	V_{DD}	I	Power supply terminal
10	MODE2	I	Mode select terminal
11	MODE1		
12	REQ/DEL1	I	Microcomputer mode: data reguest signal Easy mode: date time setting data (1) signal
13	SECK/ DEL2	I	Microcomputer mode: serial data shift clock Easy mode: delay time setting data (2) signal
14	SEDATA/ DEL3	I	Microcomputer mode: serial date signal Easy mode: delay time setting data (3) signal
15	MUTE	I	Muting control signal (H: Muting)
16	CC5	I/O	Demodulator (5) ADM control
17	GC5	I/O	Demodulator (5) gain control
18	CC4	I/O	Demodulator (4) ADM control

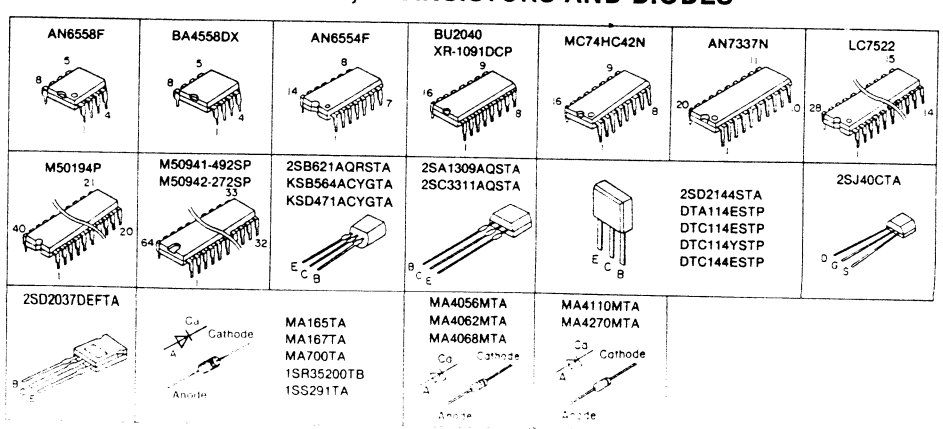
Pin No.	Mark	I/O Division	Function
19	GC4	I/O	Demodulator (4) gain control
20	NC	—	Non connection
21	NC	—	Non connection
22	GC3	I/O	Demodulator (3) gain control
23	CC3	I/O	Demodulator (3) ADM control
24	GC1	I/O	Demodulator (1) gain control
25	CC1	I/O	Demodulator (1) ADM control
26	GC2	I/O	Demodulator (2), echo and gain control surround
27	CC2	I/O	Demodulator (2), echo and surround ADM control
28	GC0	I/O	Modu lator gain control
29	CC0	I/O	Modulator ADM control
30	OP1 O	O	Integration circuit for demodulation in external capacitor
31	OP1 I	I	
32	OP2 I	I	Integration circuit for demodulation in external capacitor
33	OP2 O	O	
34	LP2 I	I	L.P.F. circuit in external capacitor and resistor
35	LP2 O	O	
36	REV	O	Adjustment tarminal of feed back guantity for REV mode
37	ECHO	O	Adjustment tarminal of feed back guan tity for echo mode
38	LP1 O	O	L.P.F. circuit in external capacitor and resistor
39	LP1 IN	I	
40	NC	—	Non connection

• IC601 (M50942-272SP)/IC801 (M50941-492SP): Microcomputer

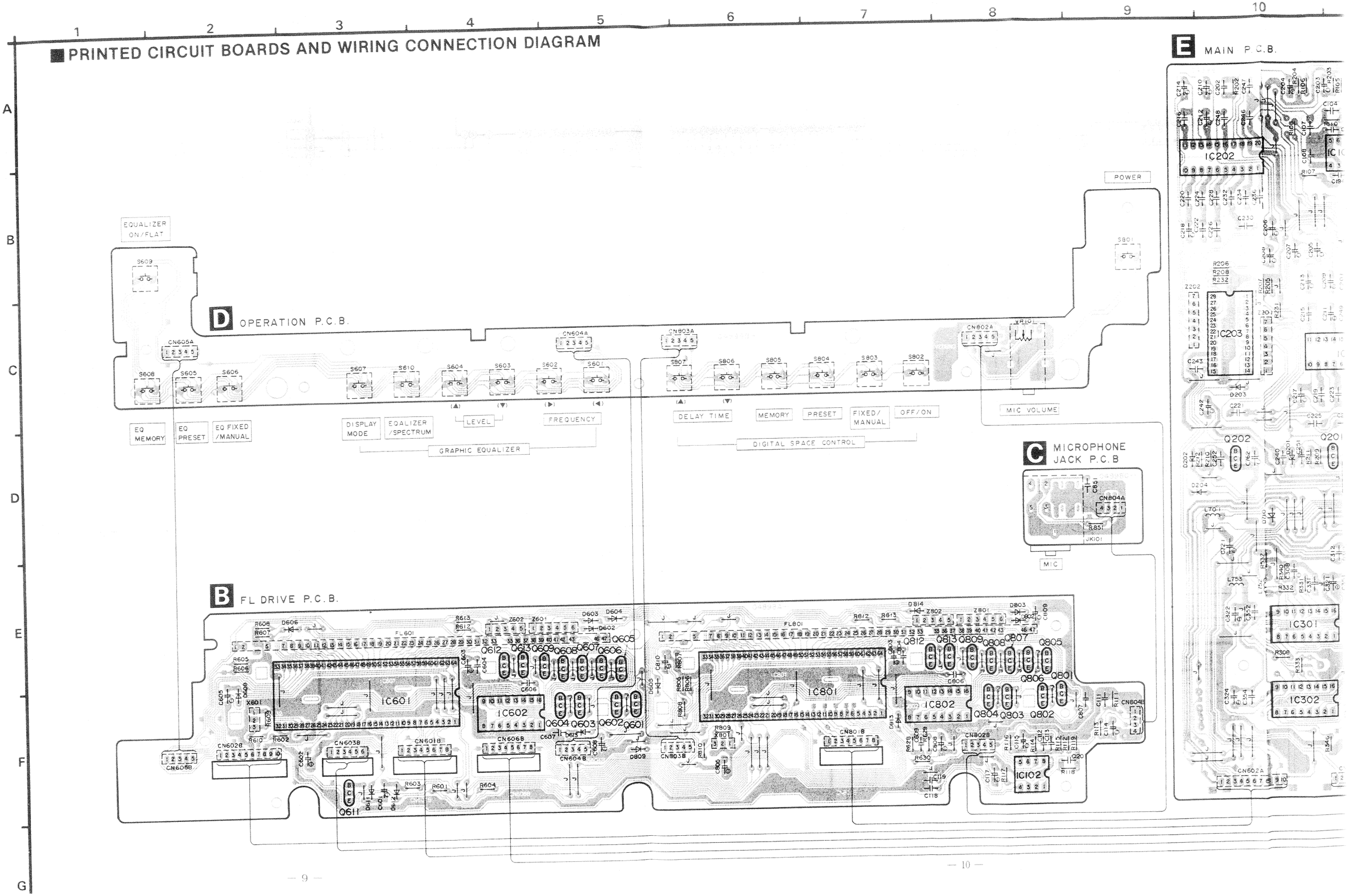
Pin No.	Mark	I/O Division	Function
1	VREF	I	Referenc'e voltage terminal for A/D converter
2	F1	I	Spectrum analyzer signal
3	F2		
4	F3		
5	F4		
6	F5		
7	F6		
8	F7		
9	PWR OUT	I	Power ON/OFF detector terminal
10	B.D.I	I	External control data signal
11	B.C.I	I	External control clock signal
12	B.D.O	O	External control data signal
13	B.C.O	O	External control clock signal
14	MUTE	O	Muting signal (Not used, connected resister)
15	DATA	O	Serial data signal
16	CLK	O	Clock signal
17	A2	—	GND terminal
18	SL12	O	Segment signal for FL display
19	SL13		
20	D	O	Digit signal for FL display
21	C		
22	B		
23	A		

Pin No.	Mark	I/O Division	Function
24	$\overline{HOLD}$	I	Power down mode detector terminal
25	PWR OUT	O	Power ON/OFF detector signal
26	CNVSS	—	GND terminal
27	$\overline{RESET}$	I	Reset signal
28	X IN	I	Crystal osc terminal (4MHz)
29	X OUT	O	
30	XC IN	—	Not used, connected to GND
31	XC OUT	—	Not used, open
32	VSS	—	GND terminal
33	Φ	—	Non connection
34 ~ 37	K0 ~ K3	I	Key scan signal
38	VP	I	Power supply terminal for FL drive
39 ~ 51	SR1 ~ SR13	O	Segment signal for FL display
52 ~ 62	SL1 ~ SL11		
63	AVCC	I	Power supply terminal
64	VCC	I	Power supply terminal

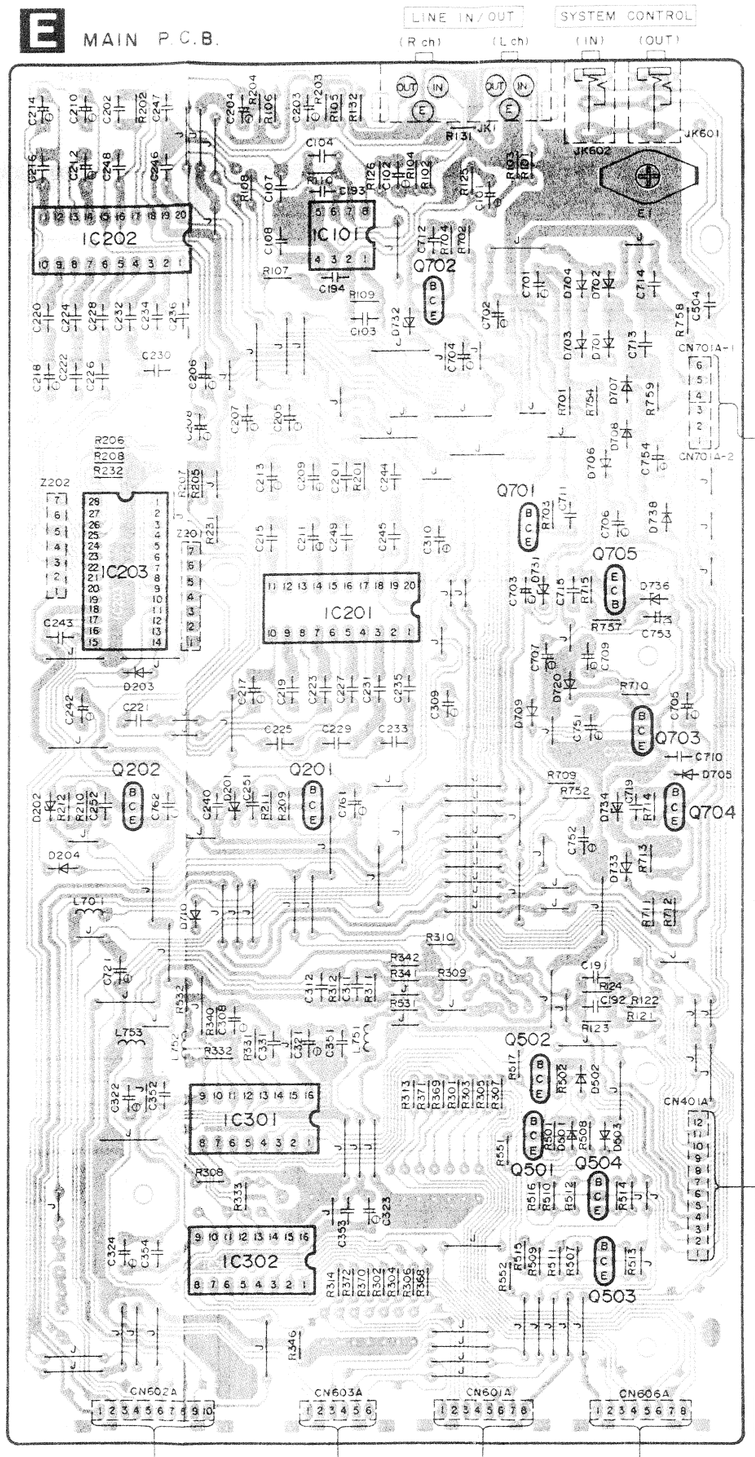
■ TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES

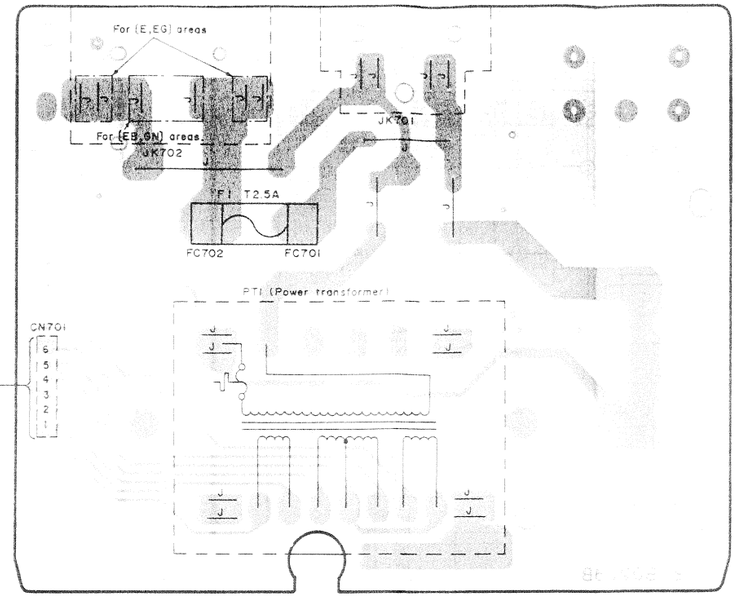


■ PRINTED CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM

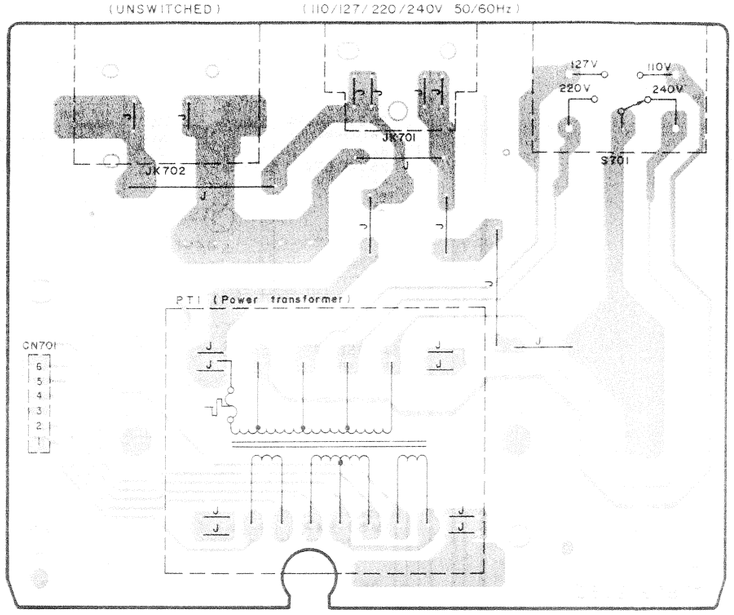


E MAIN P.C.B.



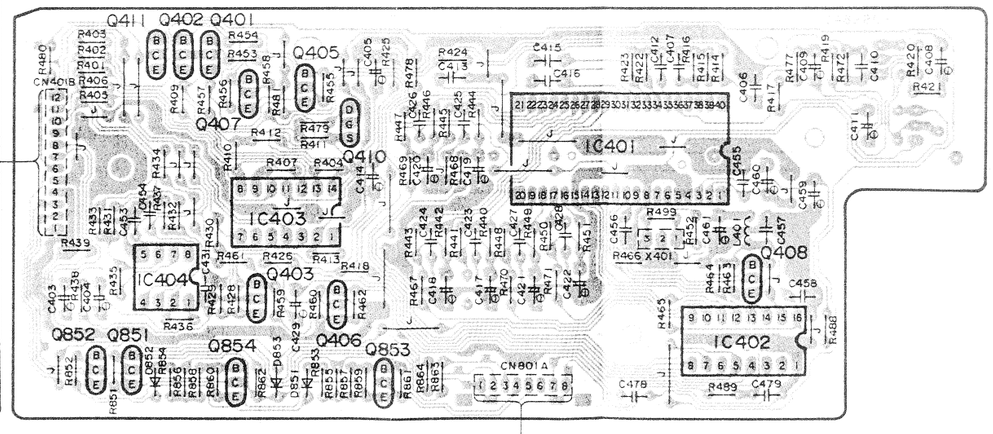


F POWER SUPPLY P.C.B. For (E,EB,EG,GN) areas.



F POWER SUPPLY P.C.B. For (GC) area.

A DIGITAL SPACE CONTROL P.C.B



A DIGITAL SPACE CONTROL CIRCUIT

B FL DRIVE CIRCUIT

C MICROPHONE JACK CIRCUIT

D OPERATION

9 10 11 12 13 14 15 16 17 18 19

FL DISPLAY

FL601 (RSL0070-F)

IC801
M50941-492SP
MICRO COMPUTER

IC601
M50942-272SP
MICRO COMPUTER

IC602
MC74HC42N
BCD-TO-DECIMAL DECODER

IC802
MC74HC42N
BCD-TO-DECIMAL DECODER

IC102
AN6558F
MIC AMP

Q601~609,612,613
DTA114ESTP
FL DISPLAY DRIVE

Q610
DTC114YSTP
SWITCHING (RESET)

D OPERATION CIRCUIT

(DIGITAL SPACE CONTROL)

S801 (POWER)
S802 (ON/OFF)
S803 (MANUAL /FIXED)
S804 (PRESET)
S805 (MEMO)
S806 (DELAY TIME ▼)
S807 (DELAY TIME ▲)
S608 (MEMO)
S609 (ON/ FLAT)
S610 (EQ./ SPECT.)
S601 (FREQ. ◀)
S602 (FREQ. ▶)
S603 (LEVEL ▼)
S604 (LEVEL ▲)
S605 (PRESET)
S606 (MANUAL /FIXED)
S607 (DISPLAY MODE)

VR101 10K(B) (MIC VOLUME)

D602~605 MA165TA

E MAIN CIRCUIT

IC201, 202
AN7337N
GRAPHIC EQUALIZER AMP

IC203
LC7522
BAND LEVEL CONTROL

IC301, 302
XR-1091DCP
SPECTRUM ANALYZER B.P. FILTER

IC101
BA4558DX
BUFFER AMP

Q503, 504
2SC3311AQSTA
SYSTEM CONT.

Q501, 502
DTC144ESTP
SYSTEM CONT.

Q201
2SC3311AQSTA
REGULATOR

Q202
2SA1309AQSTA
REGULATOR

Q703
2SC3311AQSTA
POWER DOWN DET.

Q704
2SB621AQRSTA
REGULATOR

Q705
2SD2037DEFTA
REGULATOR

Q701
KSD471ACYGTA
REGULATOR

Q702
KSB564ACYGTA
REGULATOR

CN602A
CN603A
CN601A
CN606A
CN401A

JK1
LINE IN
LINE OUT
L ch
R ch

JK602
IN
SYSTEM CONTROL

JK601
OUT

VR CONT.

F POWER SUPPLY CIRCUIT

F POWER SUPPLY CIRCUIT For (E, EB, EG, GN)areas.

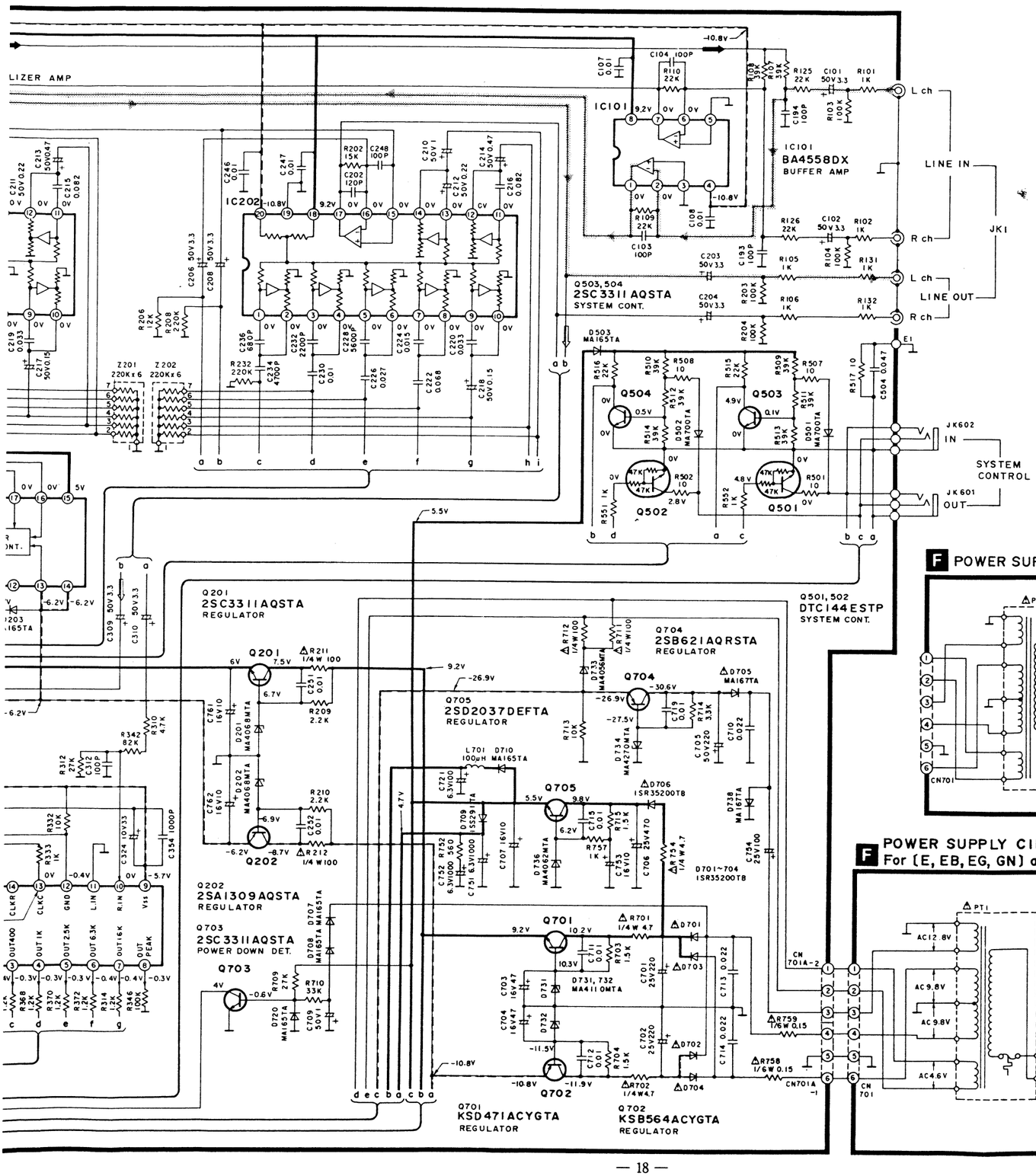
CN 701A-2
CN 701A-1
CN 701

JK701
JK702 AC OUTLE (UNSWIT

FI T2.5A

S701 (VOLTAGE ADJ.)
240V
220V
127V
110V

AC12.8V
AC9.8V
AC9.8V
AC4.6V



■ SCHEMATIC DIAGRAM

(Parts list on pages 24, 25, 28, 29.)

(This schematic diagram may be modified at any time with development of new technology.)

Notes:

- **S1** : Voltage selector switch (Voltage selector) in "**240V**" position. (110V ← 127V ← 220V ← 240V) ((GC) area only.)
- **S601, 602** : Frequency band selector (FREQUENCY) switches. [S601: ◀, S602: ▶]
- **S603, 604** : Equalizer level-control (LEVEL) switches. [S603: ▼, S604: ▲]
- **S605** : Preset-memory (EQ PRESET) switch.
- **S606** : Memory mode-select (EQ FIXED/MANUAL) switch.
- **S607** : Display mode-select (DISPLAY MODE) switch.
- **S608** : Memory (EQ MEMORY) switch.
- **S609** : Equalization mode-select (EQUALIZER-ON/FLAT) switch.
- **S610** : Equalization-level/spectrum mode-select (EQUALIZER/SPECTRUM) switch.
- **S801** : Power "STANDBY ⏻ /ON"(POWER STANDBY ⏻ /ON) switch.
- **S802** : DIGITAL SPACE CONTROL OFF/ON (OFF/ON) switch.
- **S803** : DIGITAL SPACE CONTROL mode-select (FIXED/MANUAL) switch.
- **S804** : DIGITAL SPACE CONTROL preset (PRESET) switch.
- **S805** : DIGITAL SPACE CONTROL memory (MEMORY) switch.
- **S806, 807** : Delay time (DELAY TIME) [S806: ▼, S807: ▲]
- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis fo chassis. Accordingly, there may arise some error in voltage values and waveforms dependling upon the internal impedance of the tester or the measuring unit.
- Important safety notice:
  Components identified by ⚠ mark have special characteristrics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- ——— / - - - - : Positive voltage lines and negative voltage lines.
  : Source signal
  : Spectrum analyzer signal
  : Mic signal

Caution!

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the pins of IC or LSI with fingers directly.

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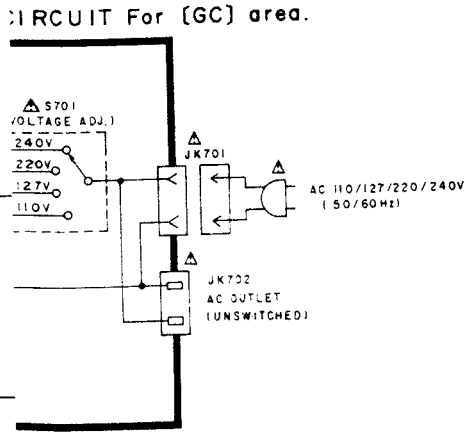
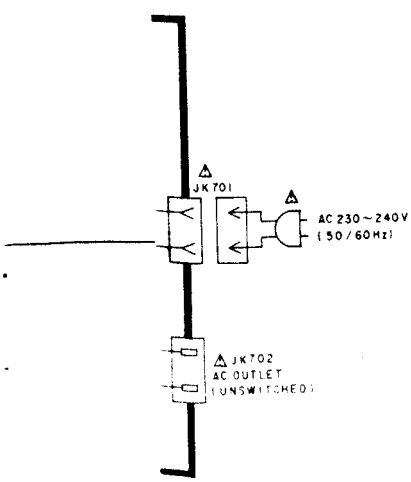
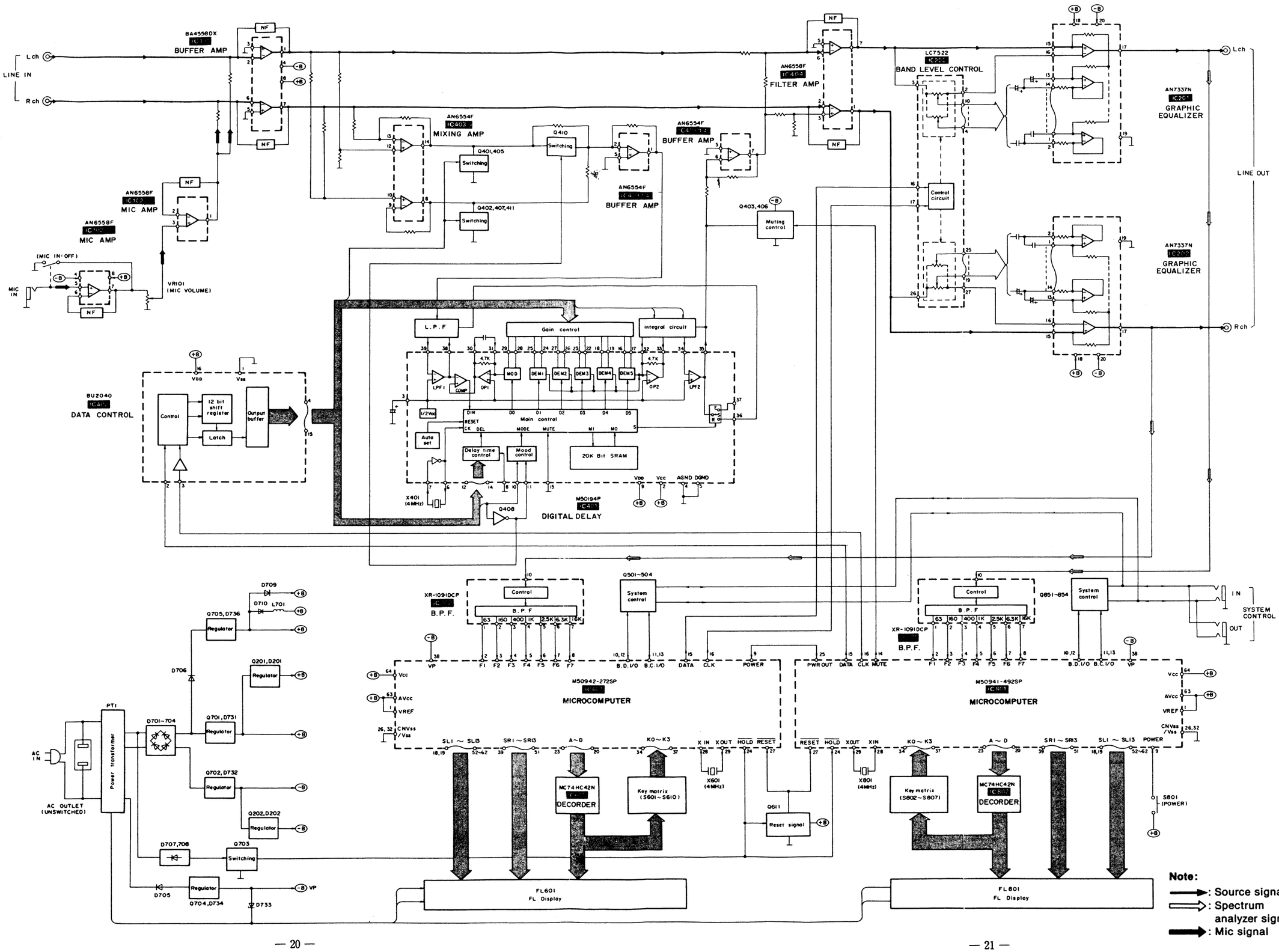
CIRCUIT For [GC] area.





SH-E85

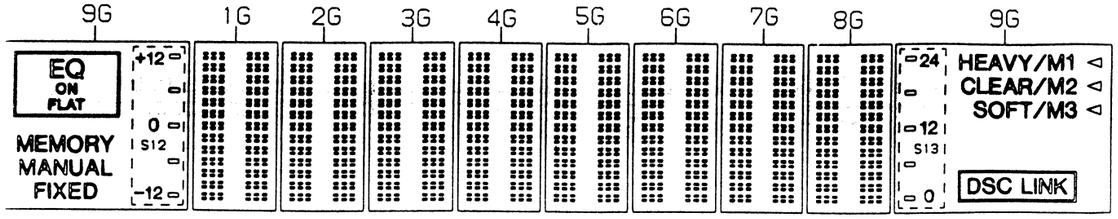
■ BLOCK DIAGRAM



■ INTERNAL CONNECTION OF FL

■ FL601 (RSL0070-F)

• Grid connection diagram



• Anode connection table

	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	-	B1	B1	B1	B1	B1	B1	B1	B1
P2	-	B2	B2	B2	B2	B2	B2	B2	B2
P3	-	B3	B3	B3	B3	B3	B3	B3	B3
P4	◁(M3)	B4	B4	B4	B4	B4	B4	B4	B4
P5	◁(M2)	B5	B5	B5	B5	B5	B5	B5	B5
P6	◁(M1)	B6	B6	B6	B6	B6	B6	B6	B6
P7	FIXED	B7	B7	B7	B7	B7	B7	B7	B7
P8	MANUAL	B8	B8	B8	B8	B8	B8	B8	B8
P9	MEMORY	B9	B9	B9	B9	B9	B9	B9	B9
P10	FLAT	B10	B10	B10	B10	B10	B10	B10	B10
P11	ON	B11	B11	B11	B11	B11	B11	B11	B11
P12	S12	B12	B12	B12	B12	B12	B12	B12	B12
P13	S13	B13	B13	B13	B13	B13	B13	B13	B13
P14	-	B14	B14	B14	B14	B14	B14	B14	B14
P15	-	B15	B15	B15	B15	B15	B15	B15	B15
P16	-	B16	B16	B16	B16	B16	B16	B16	B16
P17	-	B17	B17	B17	B17	B17	B17	B17	B17
P18	-	B18	B18	B18	B18	B18	B18	B18	B18
P19	-	B19	B19	B19	B19	B19	B19	B19	B19
P20	DSC/ROOM	B20	B20	B20	B20	B20	B20	B20	B20
P21	-	B21	B21	B21	B21	B21	B21	B21	B21
P22	-	B22	B22	B22	B22	B22	B22	B22	B22
P23	-	B23	B23	B23	B23	B23	B23	B23	B23
P24	-	B24	B24	B24	B24	B24	B24	B24	B24
P25	-	B25	B25	B25	B25	B25	B25	B25	B25
P26	-	B26	B26	B26	B26	B26	B26	B26	B26
P27	S27	-	-	-	-	-	-	-	-

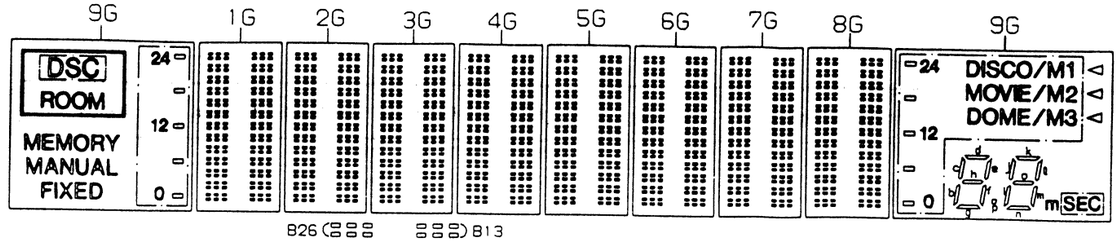
Pin connection

Pin No.	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01
Connection	F2	F2	NP	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	NP	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	N1	C3	2	1	0	9	8	7	6	5	4	3	2	1	N2	7	P	P	N	P	F1	F1

NOTE 1) F1,F2 --- Filament
2) NP ------ No pin
3) 1G~9G --- Grid

■ FL801 (RSL0069-F)

• Grid connection diagram



• Anode connection table

	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	o	B1	B1	B1	B1	B1	B1	B1	B1
P2	n	B2	B2	B2	B2	B2	B2	B2	B2
P3	m	B3	B3	B3	B3	B3	B3	B3	B3
P4	l	B4	B4	B4	B4	B4	B4	B4	B4
P5	k	B5	B5	B5	B5	B5	B5	B5	B5
P6	j	B6	B6	B6	B6	B6	B6	B6	B6
P7	i	B7	B7	B7	B7	B7	B7	B7	B7
P8	h	B8	B8	B8	B8	B8	B8	B8	B8
P9	g	B9	B9	B9	B9	B9	B9	B9	B9
P10	f	B10	B10	B10	B10	B10	B10	B10	B10
P11	e	B11	B11	B11	B11	B11	B11	B11	B11
P12	d	B12	B12	B12	B12	B12	B12	B12	B12
P13	c	B13	B13	B13	B13	B13	B13	B13	B13
P14	b	B14	B14	B14	B14	B14	B14	B14	B14
P15	m	B15	B15	B15	B15	B15	B15	B15	B15
P16	◁(M3)	B16	B16	B16	B16	B16	B16	B16	B16
P17	◁(M2)	B17	B17	B17	B17	B17	B17	B17	B17
P18	◁(M1)	B18	B18	B18	B18	B18	B18	B18	B18
P19	FIXED	B19	B19	B19	B19	B19	B19	B19	B19
P20	MANUAL	B20	B20	B20	B20	B20	B20	B20	B20
P21	MEMORY	B21	B21	B21	B21	B21	B21	B21	B21
P22	ROOM	B22	B22	B22	B22	B22	B22	B22	B22
P23	-	B23	B23	B23	B23	B23	B23	B23	B23
P24	-	B24	B24	B24	B24	B24	B24	B24	B24
P25		B25	B25	B25	B25	B25	B25	B25	B25
P26	a (p)	B26	B26	B26	B26	B26	B26	B26	B26
P27	S27	-	-	-	-	-	-	-	-

• Pin connection

Pin No.	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01
Connection	F2	F2	NP	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	NP	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	N1	C3	2	1	0	9	8	7	6	5	4	3	2	1	N2	7	P	P	N	P	F1	F1

NOTE 1) F1,F2 --- Filament
2) NP ------ No pin
3) 1G~9G --- Grid

■ REPLACEMENT PARTS LIST

Notes : * Important safety notice:
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Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	BA4558DX	IC, BUFFER AMP	
IC102	AN6558F	IC, MIC AMP	
IC201, 202	AN7337N	IC, GRAPHIC EQUALIZER AMP	
IC203	LC7522	IC, BAND LEVEL CONTROL	
IC301, 302	XR-1091DCP	IC, SPECTRUM ANALYZER B. P. F.	
IC401	M50194P	IC, DIGITAL DELAY	
IC402	BU2040	IC, DATA CONTROL	
IC403	AN6554F	IC, MIX AMP/BUFFER AMP	
IC404	AN6558F	IC, MUTING CONTROL	
IC601	M50942-272SP	IC, MICROCOMPUTER	
IC602	MC74HC42N	IC, B/D DECODER	
IC801	M50941-492SP	IC, MICROCOMPUTER	
IC802	MC74HC42N	IC, B/D DECODER	
		TRANSISTOR(S)	
Q201	2SC3311A-Q	TRANSISTOR	
Q202	2SA1309A-R	TRANSISTOR	
Q401-403	2SD2144S	TRANSISTOR	
Q405-408	DTA114ESTP	TRANSISTOR	
Q410	2SJ40CTA	TRANSISTOR	
Q411	DTC114ESTP	TRANSISTOR	
Q501, 502	DTC144EKT96	TRANSISTOR	
Q503, 504	2SC3311A-Q	TRANSISTOR	
Q601-609	DTA114ESTP	TRANSISTOR	
Q611	DTC114YSTP	TRANSISTOR	
Q612, 613	DTA114ESTP	TRANSISTOR	
Q701	KSD471ACYGTA	TRANSISTOR	
Q702	KSB564ACYGTA	TRANSISTOR	
Q703	2SC3311A-Q	TRANSISTOR	
Q704	2SB621A-R	TRANSISTOR	
Q705	2SD2037DEFTA	TRANSISTOR	
Q801-809	DTA114ESTP	TRANSISTOR	
Q812, 813	DTA114ESTP	TRANSISTOR	
Q851, 852	DTC114YSTP	TRANSISTOR	
Q853, 854	2SC3311A-Q	TRANSISTOR	
		DIODE(S)	
D201, 202	MA4068M	DIODE	
D203, 204	MA165	DIODE	
D501, 502	MA700TA	DIODE	
D503	MA165	DIODE	
D602-606	MA165	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D609	MA165	DIODE	
D611-613	MA165	DIODE	
D701-704	1SR35200TB	DIODE	⚠
D705	MA167	DIODE	⚠
D706	1SR35200TB	DIODE	⚠
D707, 708	MA165	DIODE	
D709	1SS291TA	DIODE	
D710	MA165	DIODE	
D720	MA165	DIODE	
D731, 732	MA4110MTA	DIODE	
D733	MA4056MTA	DIODE	
D734	MA4270	DIODE	
D736	MA4062MTA	DIODE	
D738	MA167	DIODE	
D802, 803	MA165	DIODE	
D809	MA165	DIODE	
D813, 814	MA165	DIODE	
D851, 852	MA700TA	DIODE	
D853	MA165	DIODE	
		VARIABLE RESISTOR(S)	
VR101	EVJ02BF01B14	V. R, MIC VOLUME	
		COMPONENT COMBINATION(S)	
Z201, 202	EXBF7E224JYV	COMPONENT COMBINATION	
Z601	EXBF6E104JYV	COMPONENT COMBINATION	
Z602	EXBF5E104JYV	COMPONENT COMBINATION	
Z801	EXBF6E104JYV	COMPONENT COMBINATION	
Z802	EXBF5E104JYV	COMPONENT COMBINATION	
		COIL(S)	
L401	RLQZP101KT-Y	COIL	
L701	ELEXT101KA9	COIL	
L751-753	ELEXT4R7KA9	COIL	
		OSCILLATOR(S)	
X401	EFOGC4004A4	OSCILLATOR, 4MHz	
X601	EFOGC4004A4	OSCILLATOR, 4MHz	
X801	EFOGC4004A4	OSCILLATOR, 4MHz	
		DISPLAY TUBE	
FL601	RSL0070-F	DISPLAY TUBE	

Ref. No.	Part No.	Part Name & Description	Remarks
FL801	RSL0069-F	DISPLAY TUBE	
		FUSE	
F1	XBA2C25TB0	FUSE, 250V 2.5A	(E, EB, EG, GN) ⚠
		SWITCH(ES)	
S601	EVQ21405R	SW, FREQUENCY(DOWN)	
S602	EVQ21405R	SW, FREQUENCY(UP)	
S603	EVQ21405R	SW, LEVEL(DOWN)	
S604	EVQ21405R	SW, LEVEL(UP)	
S605	EVQ21405R	SW, EQ PRESET	
S606	EVQ21405R	SW, EQ MANUAL/FIXED	
S607	EVQ21405R	SW, DISPLAY MODE	
S608	EVQ21405R	SW, EQ MEMORY	
S609	EVQ21405R	SW, EQUALIZER ON/FLAT	
S610	EVQ21405R	SW, EQUALIZER/SPECTRUM	
S701	SSR187-1	SW, VOLTAGE SELECTOR	(GC) ⚠
S801	EVQ21405R	SW, POWER	
S802	EVQ21405R	SW, D. S. C. OFF/ON	
S803	EVQ21405R	SW, D. S. C. MANUAL/FIXED	
S804	EVQ21405R	SW, D. S. C. PRESET CH	
S805	EVQ21405R	SW, D. S. C. MEMORY	
S806	EVQ21405R	SW, D. S. C. DELAY TIME(DOWN)	
S807	EVQ21405R	SW, D. S. C. DELAY TIME(UP)	
		CONNECTOR(S)&SOCKET(S)	
CN701	SJT30643-V	CONNECTOR(6P)	
CN401A	RJU005W012	SOCKET(12P)	
CN601A	RJU003K008M1	SOCKET(8P)	
CN602A	RJU003K010M1	SOCKET(10P)	
CN603A	RJU003K006M1	SOCKET(6P)	
CN604A	SJS50581BB	SOCKET(5P)	
CN605A	SJS50581BB	SOCKET(5P)	
CN606A	RJU003K008M1	SOCKET(8P)	
CN801A	RJU003K008M1	SOCKET(8P)	
CN802A	SJS50581BB	SOCKET(5P)	
CN803A	SJS50581BB	SOCKET(5P)	
CN804A	RJU057W004	CONNECTOR(4P)	
CN701A1, 2	RJS1A1703	CONNECTOR (3P)	
CN401B	RJT005W012	CONNECTOR(12P)	
CN601B	RJT003K008M1	CONNECTOR(8P)	
CN602B	RJT003K010M1	CONNECTOR(10P)	
CN603B	RJT003K006M1	CONNECTOR(6P)	
CN604B	SJT30549BB1	CONNECTOR(5P)	
CN605B	SJT30549BB1	CONNECTOR(5P)	
CN606B	RJT003K008M1	CONNECTOR(8P)	
CN801B	RJT003K008M1	CONNECTOR(8P)	
CN802B	SJT30549BB1	CONNECTOR(5P)	
CN803B	SJT30549BB1	CONNECTOR(5P)	

Ref. No.	Part No.	Part Name & Description	Remarks
CN804B	RJT057W004-1	CONNECTOR(4P)	
		JACK(S)	
JK1	SJF3069-2N	INPUT/OUTPUT TERMINAL	
JK101	RJJ65MA01	MIC JACK	
JK601	RJJ33T01	M3 JACK(OUT)	
JK602	RJJ33T01	M3 JACK(IN)	
		GND PLATE	
E1	SNE1004-1	GND PLATE	
		FUSE HOLDER(S)	
FC701, 702	EYF52BC	FUSE HOLDER	(E, EB, EG, GN) ⚠
		TRANSFORMER	
PT1	RTP1K4B012	POWER TRANSFORMER	(E, EB, EG, GN) ⚠
PT1	RTP1K4E020	POWER TRANSFORMER	(GC) ⚠

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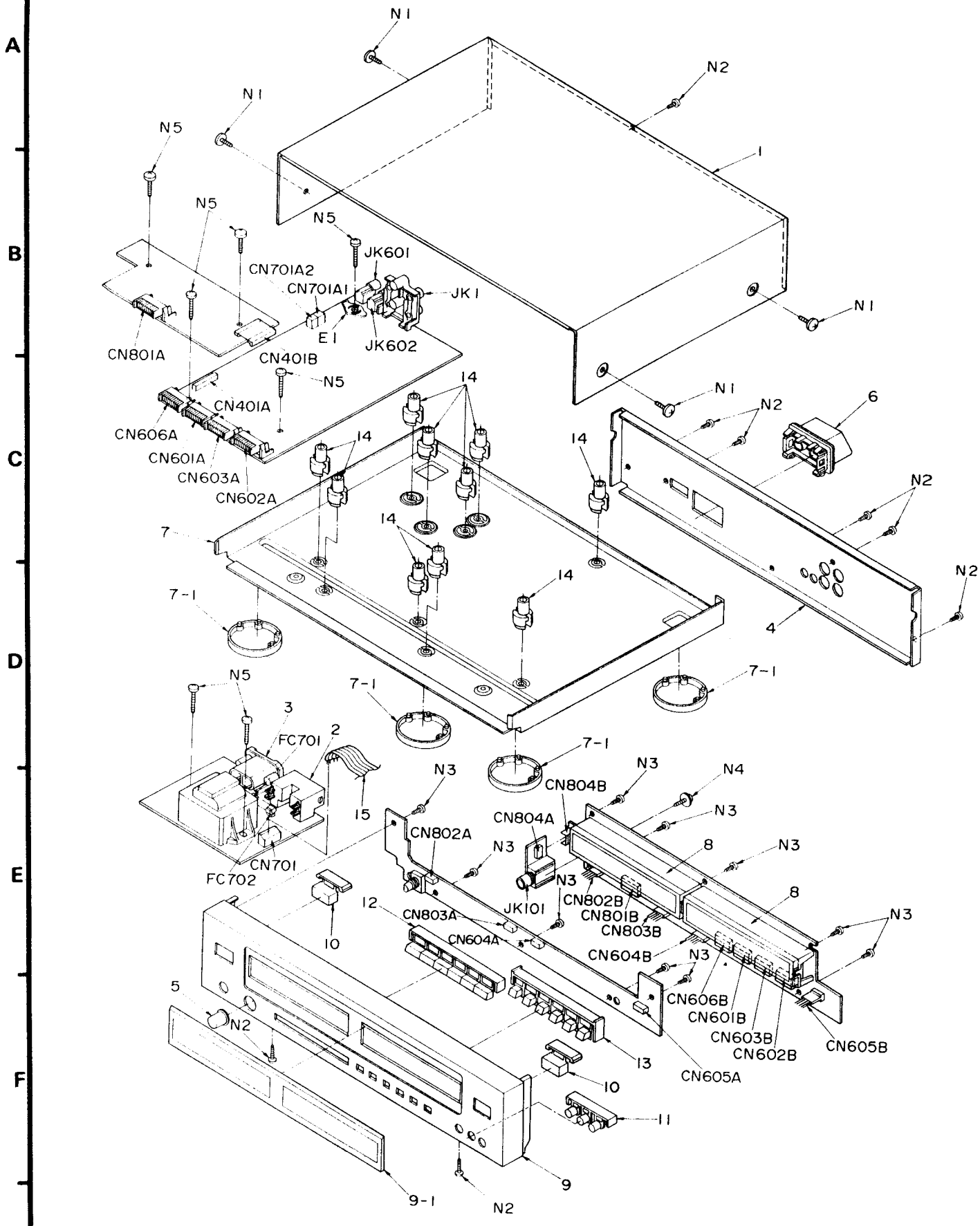
Parts without these indications can be used for all areas.

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RKM0139-K	CABINET	
2	RJS1A4902-B	AC OUTLET (JK702)	(E, EG)
2	RJS1A4802-B	AC OUTLET (JK702)	(EB)
2	SJS9331B	AC OUTLET (JK702)	(GC)
2	RJS1A8102	AC OUTLET (JK702)	(GN)
3	SJS9236	AC INLET (JK701)	(E, EB, EG, GC) ⚠
3	SJSD16	AC INLET (JK701)	(GN) ⚠
4	RGR0098P-C	REAR PANEL	(E)
4	RGR0098P-D	REAR PANEL	(EG)
4	RGR0098N-B	REAR PANEL	(EB)
4	RGR0098Q-B	REAR PANEL	(GC)
4	RGR0098R-B	REAR PANEL	(GN)
5	RGW0055	KNOB, MIC VOLUME	
6	RJS1A4902-A	AC OUTLET COVER	(E, EG)
6	RJS1A4802-A	AC OUTLET COVER	(EB)
6	SJS9331A	AC OUTLET COVER	(GC)
6	RJS1A4602	AC OUTLET COVER	(GN)
7	RFKJTX302LEK	CHASSIS ASS'Y	
7-1	RKA0011-2	FOOT	
8	RMN0100	FL HOLDER	
9	RFKGHE85E-K	FRONT PANEL ASS'Y	
9-1	RKW0126-K1	FL FILTER	
10	RGU0453-K	BUTTON, POWER	
11	RGU0455-K	BUTTON, EQUALIZER	
12	RGU0466-K1	BUTTON, DSC FUNCTION	
13	RGU0590A-K	BUTTON, GE FUNCTION	
14	SHE187-2	P. C. B. SUPPORT	
15	RWJ1806130QQ	FLAT CABLE (6P)	
		SCREWS	
N1	RHD30007	SCREW	
N2	XTBS3+8JFZ1	SCREW	
N3	XTBS26+8J	SCREW	
N4	XTWS3+8T	SCREW	
N5	XTB3+20JFZ	SCREW	
		PACKING MATERIAL	
P1	RPG0850	CARTON BOX	
P2	RPN0413-1	PAD	
P3	SPSD152	ACCESSORY BOX	
P4	SPP753	PROTECTION BAG (UNIT)	
P5	SPB1061	PROTECTION BAG (F. B)	

Ref. No.	Part No.	Part Name & Description	Remarks
		ACCESSORIES	
A1	RFKSHE85E-K	INSTRUCTION MANUAL ASS'Y	(E)
A1	RQT0955-B	INSTRUCTION MANUAL	(EB, GN)
A1	RQT0956-D	INSTRUCTION MANUAL	(EG)
A1	RQT0953-G	INSTRUCTION MANUAL	(GC)
A2	RQA0013	WARRANTY CARD	(E, EB, EG)
A2	SQX7186	WARRANTY CARD	(GN)
A3	RQCB0169	SERVICENTER LIST	
A4	SJA187	AC POWER SUPPLY CORD	(E, EG) ⚠
A4	SJA188	AC POWER SUPPLY CORD	(EB) ⚠
A4	RJA0004	AC POWER SUPPLY CORD	(GC) ⚠
A4	SJA173	AC POWER SUPPLY CORD	(GN) ⚠
A5	SJP2249-3	STEREO CONNECTION CABLE	
A6	SJP2257T	L-TYPE CABLE	
A7	SQX40014	CAUTION CARD	(GC)
A8	SJP9215	AC PLUG ADAPTER	(GC) ⚠

■EXPLODED VIEW



■ RESISTORS & CAPACITORS

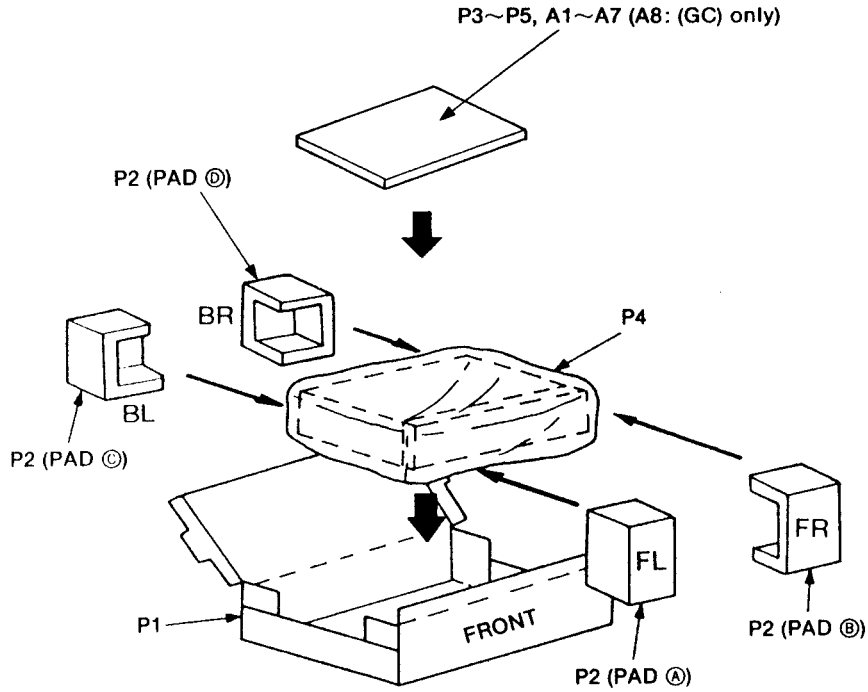
Notes : • Capacity valuse are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
• Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R101, 102	ERDS2TJ102	1/4W 1K
R103, 104	ERDS2TJ104	1/4W 100K
R105, 106	ERDS2TJ102	1/4W 1K
R107, 108	ERDS2TJ393	1/4W 39K
R109, 110	ERDS2TJ223	1/4W 22K
R111	ERDS2TJ473	1/4W 47K
R112	ERDS2TJ123	1/4W 12K
R113	ERDS2TJ102	1/4W 1K
R114	ERDS2TJ154	1/4W 150K
R115	ERDS2TJ821	1/4W 820
R116	ERDS2TJ102	1/4W 1K
R117	ERDS2TJ104	1/4W 100K
R118, 119	ERDS2TJ103	1/4W 10K
R121, 122	ERDS2TJ153	1/4W 15K
R123-126	ERDS2TJ223	1/4W 22K
R131, 132	ERDS2TJ102	1/4W 1K
R201, 202	ERDS2TJ153	1/4W 15K
R203, 204	ERDS2TJ104	1/4W 100K
R205, 206	ERDS2TJ123	1/4W 12K
R207, 208	ERDS2TJ224T	1/4W 220K
R209, 210	ERDS2TJ222	1/4W 2.2K
R211, 212	ERD25FJ101	1/4W 100 ⚠
R231, 232	ERDS2TJ224T	1/4W 220K
R301-307	ERDS2TJ122	1/4W 1.2K
R308	ERDS2TJ104	1/4W 100K
R309, 310	ERDS2TJ472	1/4W 4.7K
R311, 312	ERDS2TJ273	1/4W 27K
R313, 314	ERDS2TJ122	1/4W 1.2K
R331	ERDS2TJ152	1/4W 1.5K
R332	ERDS2TJ103	1/4W 10K
R333	ERDS2TJ102	1/4W 1K
R340	ERDS2TJ471	1/4W 470
R341, 342	ERDS2TJ823T	1/4W 82K
R346	ERDS2TJ104	1/4W 100K
R368-372	ERDS2TJ122	1/4W 1.2K
R401, 402	ERDS2TJ103	1/4W 10K
R403, 404	ERDS2TJ153	1/4W 15K
R405, 406	ERDS2TJ103	1/4W 10K
R407	ERDS2TJ122	1/4W 1.2K
R409, 410	ERDS2TJ472	1/4W 4.7K
R411, 412	ERDS2TJ563	1/4W 56K
R413	ERDS2TJ273	1/4W 27K
R414	ERDS2TJ153	1/4W 15K
R415	ERDS2TJ103	1/4W 10K
R416	ERDS2TJ153	1/4W 15K
R417	ERDS2TJ332	1/4W 3.3K
R418	ERDS2TJ123	1/4W 12K
R419	ERDS2TJ392T	1/4W 3.9K
R420	ERDS2TJ222	1/4W 2.2K
R421	ERDS2TJ183T	1/4W 18K
R422	ERDS2TJ124T	1/4W 120K
R423, 424	ERDS2TJ153	1/4W 15K
R425	ERDS2TJ272T	1/4W 2.7K
R426	ERDS2TJ123	1/4W 12K
R428	ERDS2TJ272T	1/4W 2.7K
R429	ERDS2TJ223	1/4W 22K
R430	ERDS2TJ333	1/4W 33K
R431	ERDS2TJ272T	1/4W 2.7K
R432-436	ERDS2TJ332	1/4W 3.3K
R437	ERDS2TJ562	1/4W 5.6K
R438, 439	ERDS2TJ224T	1/4W 220K
R440	ERDS2TJ752T	1/4W 7.5K
R441	ERDS2TJ753T	1/4W 75K
R442	ERDS2TJ752T	1/4W 7.5K
R443	ERDS2TJ753T	1/4W 75K
R444	ERDS2TJ752T	1/4W 7.5K
R445	ERDS2TJ753T	1/4W 75K
R446	ERDS2TJ752T	1/4W 7.5K
R447, 448	ERDS2TJ753T	1/4W 75K
R449	ERDS2TJ752T	1/4W 7.5K
R450	ERDS2TJ753T	1/4W 75K
R451	ERDS2TJ752T	1/4W 7.5K
R452	ERDS2TJ102	1/4W 1K
R453, 454	ERDS2TJ103	1/4W 10K
R455, 456	ERDS2TJ105T	1/4W 1M
R457, 458	ERDS2TJ334	1/4W 330K
R459	ERDS2TJ103	1/4W 10K
R460	ERDS2TJ105T	1/4W 1M
R461	ERDS2TJ334	1/4W 330K
R462-466	ERDS2TJ103	1/4W 10K
R467	ERDS2TJ822	1/4W 8.2K
R468	ERDS2TJ123	1/4W 12K
R469	ERDS2TJ562	1/4W 5.6K
R470	ERDS2TJ472	1/4W 4.7K
R471	ERDS2TJ332	1/4W 3.3K
R472	ERDS2TJ104	1/4W 100K
R477	ERDS2TJ822	1/4W 8.2K
R478	ERDS2TJ103	1/4W 10K
R479	ERDS2TJ683	1/4W 68K
R480, 481	ERDS2TJ103	1/4W 10K
R488	ERDS2TJ220T	1/4W 22
R489	ERDS2TJ103	1/4W 10K
R499	ERDS2TJ105T	1/4W 1M
R501, 502	ERDS2TJ100	1/4W 10
R507, 508	ERDS2TJ100	1/4W 10
R509-514	ERDS2TJ393	1/4W 39K
R515, 516	ERDS2TJ223	1/4W 22K
R517	ERDS2TJ100	1/4W 10
R531, 532	ERDS2TJ220T	1/4W 22
R551, 552	ERDS2TJ102	1/4W 1K
R601	ERDS2TJ103	1/4W 10K
R602	ERDS2TJ473	1/4W 47K
R603	ERDS2TJ103	1/4W 10K
R604	ERDS2TJ473	1/4W 47K
R605-608	ERDS2TJ103	1/4W 10K
R609	ERDS2TJ105T	1/4W 1M
R610	ERDS2TJ102	1/4W 1K
R612, 613	ERDS2TJ104	1/4W 100K
R628	ERDS2TJ473	1/4W 47K
R629	ERDS2TJ222	1/4W 2.2K
R630	ERDS2TJ102	1/4W 1K
R701, 702	ERD2FCVJ4R7T	1/4W 4.7 ⚠
R703, 704	ERDS2TJ152	1/4W 1.5K
R709	ERDS2TJ273	1/4W 27K
R710	ERDS2TJ333	1/4W 33K
R711, 712	ERD25FJ101	1/4W 100 ⚠
R713	ERDS2TJ103	1/4W 10K
R714	ERDS2TJ332	1/4W 3.3K
R715	ERDS2TJ152	1/4W 1.5K
R752	ERDS2TJ561	1/4W 560
R754	ERD2FCVJ4R7T	1/4W 4.7 ⚠
R757	ERDS2TJ102	1/4W 1K
R758, 759	ERQ16NKR15E	1/6W 0.15 ⚠
R805-808	ERDS2TJ103	1/4W 10K
R809	ERDS2TJ105T	1/4W 1M
R810	ERDS2TJ102	1/4W 1K
R812, 813	ERDS2TJ104	1/4W 100K
R851	ERDS2TJ100	1/4W 10
R851	ERDS2TJ102	1/4W 1K
R852-854	ERDS2TJ100	1/4W 10
R855-860	ERDS2TJ393	1/4W 39K
R861, 862	ERDS2TJ223	1/4W 22K
R863, 864	ERDS2TJ393	1/4W 39K
		CAPACITORS
C101, 102	ECEA1HKA3R3B	50V 3.3U
C103, 104	ECBT1H101KB5	50V 100P
C107, 108	ECBT1E103ZF	25V 0.01U
C111	ECBT1H102KB5	50V 1000P
C112, 113	ECBT1H101KB5	50V 100P
C114	ECEA1HKA3R3B	50V 3.3U
C115	ECEA1CKA100B	16V 10U
C117	ECEA1HKA3R3B	50V 3.3U

Ref. No.	Part No.	Values & Remarks
C118, 119	ECBT1E103ZF	25V 0.01U
C120	ECBT1H101KB5	50V 100P
C191, 192	ECBT1H151KB5	50V 150P
C193, 194	ECBT1H101KB5	50V 100P
C201, 202	ECBT1H121KB5	50V 120P
C203-208	ECEA1HKA3R3B	50V 3.3U
C209, 210	ECEA1HKA010B	50V 1U
C211, 212	ECEA1HKAR22B	50V 0.22U
C213, 214	ECEA1HKAR47B	50V 0.47U
C215, 216	ECFR1E823KR	25V 0.082U
C217, 218	ECEA1HKAR15B	50V 0.15U
C219, 220	ECFR1E333KR	25V 0.033U
C221, 222	ECFR1E683KR	25V 0.068U
C223, 224	ECFR1E153KR	25V 0.015U
C225, 226	ECFR1E273KR	25V 0.027U
C227, 228	ECFR1E562KR	25V 5600P
C229, 230	ECFR1E103KR	25V 0.01U
C231, 232	ECFR1E222KR	25V 2200P
C233, 234	ECFR1E472KR	25V 4700P
C235, 236	ECKD1H681KB	50V 680P
C240	ECBT1E103ZF	25V 0.01U
C242	ECEA1AKA470B	10V 47U
C243-247	ECBT1E103ZF	25V 0.01U
C248, 249	ECBT1H101KB5	50V 100P
C251, 252	ECBT1E103ZF	25V 0.01U
C308	ECEA1CKA100B	16V 10U
C309, 310	ECEA1HKA3R3B	50V 3.3U
C311, 312	ECBT1H101KB5	50V 100P
C321-324	ECEA1AKA330B	10V 33U
C331	ECQM1H102JZ	50V 1000P
C351-354	ECBT1H102KB5	50V 1000P
C403, 404	ECA1HAP100B	50V 10U
C405	ECEA1HKA010B	50V 1U
C406	ECFR1E123KR	25V 0.012U
C407	ECBT1C122KR5	16V 1200P
C408	ECEA1CKA100B	16V 10U
C409	ECEA1HKA010B	50V 1U
C410	ECBT1C103KS5	16V 0.01U
C411	ECEA1HKA010B	50V 1U
C412	ECBT1H561KB5	50V 560P
C413	ECBT1C562KR5	16V 5600P
C414	ECEA1HKA010B	50V 1U
C415, 416	ECFR1E473KR	25V 0.047U
C417-422	ECEA1HKAR33B	50V 0.33U
C423-428	ECBT1C103KS5	16V 0.01U
C429	ECEA1HKA010B	50V 1U
C431	ECBT1H101KB5	50V 100P
C453, 454	ECBT1E103ZF	25V 0.01U
C455-457	ECBT1H104ZF5	50V 0.1U
C458	ECBT1E103ZF	25V 0.01U
C459	ECEA0JKA101B	6.3V 100U
C460	ECEA0JKA470B	6.3V 47U

Ref. No.	Part No.	Values & Remarks
C461	ECEA0JKA101B	6.3V 100U
C478	ECBT1H102KB5	50V 1000P
C479	ECBT1H470J5	50V 47P
C504	ECKR1H473ZF5	50V 0.047U
C601	ECEA1HKAR47B	50V 0.47U
C602	ECEA1HKA2R2B	50V 2.2U
C603	ECEA0JKA101B	6.3V 100U
C604	ECBT1E103ZF	25V 0.01U
C605	ECEA1CKA220B	16V 22U
C606, 607	ECBT1E103ZF	25V 0.01U
C608	ECEA0JKA101B	6.3V 100U
C609	ECBT1E103ZF	25V 0.01U
C701, 702	ECA1EM221B	25V 220U
C703, 704	ECEA1CKA470B	16V 47U
C705	ECA1HM221B	50V 220U
C706	ECA1EM471B	25V 470U
C707	ECEA1CKA100B	16V 10U
C709	ECEA1HKA010B	50V 1U
C710	ECKT1H223ZF	50V 0.022U
C711, 712	ECKR1H103ZF5	50V 0.01U
C713, 714	ECKT1H223ZF	50V 0.022U
C715	ECKR1H103ZF5	50V 0.01U
C719	ECKR1H103ZF5	50V 0.01U
C721	ECEA0JKA101B	6.3V 100U
C751, 752	ECA0JM102B	6.3V 1000U
C753	ECEA1CKA100B	16V 10U
C754	ECA1EM101B	25V 100U
C761, 762	ECEA1CKA100B	16V 10U
C803	ECEA0JKA101B	6.3V 100U
C804	ECBT1E103ZF	25V 0.01U
C805	ECEA1CKA220B	16V 22U
C806, 807	ECBT1E103ZF	25V 0.01U
C808	ECEA0JKA101B	6.3V 100U
C809, 810	ECEA1HKA010B	50V 1U
C851	ECBT1H101KB5	50V 100P

■ PACKING



(PAD Ⓐ Ⓑ Ⓒ Ⓓ: Part No. RPN0413-1)

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